

## REMARKS

Applicant thanks the Examiner for the remarks and analysis contained within the Non-Final Office Action dated June 8, 2009. New claim 30 is presented. Applicant respectfully requests reconsideration of this application.

### Interview Summary

An interview was conducted on September 2, 2009. The Examiner's §103 rejection of *Arts* in view of *Ichikawa* was discussed, as Applicant wished to gain a better understanding of the Examiner's positions. In addition, potential amendments to gain allowance of this application were discussed, including features related to the shield of the claimed indoor air quality module.

### 103 Rejections

Claims 1, 2, 4, 5, 7-10, 12-16, 21-23, 25, 27 and 29 stand rejected under 35 U.S.C. §103(a) as being obvious over *Arts*, *et al.* in view of *Ichikawa*. The Examiner acknowledges that *Arts*, *et al.* does not disclose a monolith having a photocatalytic coating on the monolith. However, in view of *Ichikawa*, the Examiner contends it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a monolithic filter having a honeycomb shape with hexagonal passages in the module of *Arts*, *et al.* to provide a filter that reduces the amount of harmful gases, such as carbon monoxide and nitrogen oxide, in the air. Applicant respectfully disagrees with these rejections.

First, *Ichikawa* does not disclose a monolith as suggested by the Examiner. The term monolith is never used within the entire disclosure of *Ichikawa*. *Ichikawa* discloses a hexagonal cell honeycomb which is particularly used as a carrier for catalyst for purification of automobile exhaust gas. See column 4, lines 29-35. The Examiner has provided no evidence, and there is none evident in *Ichikawa*, that the hexagonal cell honeycomb of *Ichikawa* is equivalent to the claimed "monolith." Accordingly, the rejection of the claims as obvious over *Arts*, *et al.* in view of *Ichikawa* is improper.

Moreover, according to MPEP 2141.01(a), a reference must be analogous prior art to be relied upon under 35 U.S.C. §103(a). Here, *Arts*, *et al.* deals with an air contamination device for killing biological agents. See paragraph 10. In contrast, the *Ichikawa* reference discloses a hexagonal cell honeycomb structure used as a carrier for a catalyst for purification of automobile exhaust gas. The teachings of *Ichikawa* would not have logically commended themselves to the

inventor's attention when considering the invention for the claimed indoor air quality module because the indoor air quality module is concerned with purifying air for a commercial or residential building, while *Ichikawa* is concerned with purifying air of an exhaust system of an automobile. For these reasons, *Arts, et al.* and *Ichikawa* are not analogous prior art.

Furthermore, there is no *prima facie* case of obviousness. MPEP 2143.01(V) and (VI) indicate that a reference's teachings cannot be modified in any way that would either render a base reference incapable of achieving its intended result or change the principle of operation of the base reference. The proposed modification to *Arts, et al.* would improperly do both.

First, the proposed modification of *Arts, et al.* with the hexagonal cell honeycomb structure of *Ichikawa* would destroy the main goal of *Arts, et al.* of slowing contaminants that pass through the filter 12. As described in paragraph 54 of *Arts, et al.*, the filter 12 is designed to slow the movement of contaminants, providing more time for biological agents to be killed by the UV light directed toward the filter 12. Providing an open cell honeycomb structure in the filter 12 would allow the contaminants to more freely move through the filter 12, thus rendering *Arts, et al.* incapable of achieving its intended result.

Second, the proposed modification of *Arts, et al.* would change the principle of operation of *Arts, et al.*. As explained above, *Arts, et al.* is concerned with decontaminating biological agents. Modifying *Arts, et al.* with the teachings of *Ichikawa* would change the principle of operation of *Arts, et al.* from a device for killing biological agents, to a device more concerned with purification of automobile exhaust gas. This is improper. Accordingly, the claims are not obvious.

Claims 3, 6, 24, 26 and 28 are also rejected as being obvious over *Arts, et al.* in view of *Ichikawa* and in further view of several other references. For reasons identified above, the proposed modification of *Arts, et al.* in view of *Ichikawa* is improper, and the additional references do not cure these deficiencies. Accordingly, these claims are also not obvious.

#### **Double Patenting**

The Examiner provisionally rejected claims 1-5 and 10 on the grounds of non-statutory obviousness type double patenting as being unpatentable over co-pending applications 10/788,845 and 10/789,962 in view of *Arts, et al.* Applicant postpones comment on these rejections until the order of issuance of the pending applications is determined.

**New Claim**

Applicant submits new claim 30 directed to an indoor air quality module. The proposed claim includes a shield that “extends across an entire width of the compartment.” The reflectors 56b of *Arts, et al.* do not extend across an entire width of the compartment as is evident from Figure 5, a top view of the decontamination unit. For at least this reason, claim 30 is neither anticipated nor made obvious by the prior art of record.

Applicant believes that additional fees in the amount of \$52.00 are required for one additional claim in excess of twenty. The Commissioner is authorized to charge Deposit Account No. 03-0835 in the name of Carrier Corporation in the amount of \$52.00, as well as for any additional fees or credit the account for any overpayment.

Respectfully submitted,  
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